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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,339	10/08/2004	Yutaka Minami	259313US0PCT	3639
22850	7590	05/09/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LU, C CAIXIA	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,339

Applicant(s)

MINAMI ET AL.

Examiner

Caixia Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/14/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kijima (WO 01/96490, its English equivalent, US 6,797,774, is referred to in the rejections hereinafter for convenience) alone or in view of Okamoto et al (EP 1 227 112).

Kijima teaches the process for prepare a propylene polymer with an intrinsic viscosity of 0.01 to 2.0 dl/g in the presence of a double bridged metallocene of formula (I) and cocatalyst of (B-1) as shown in col. 2, line 32 to col. 3, line 32, and col. 4, line 22 to col. 5, line 36. Kijima's propylene polymer is for making hot melt adhesives.

Okamoto teaches the process for prepare a propylene polymer with an intrinsic viscosity of as low as 0.5 dl/g in the presence of a double bridged metallocene of formula (I) and cocatalyst of (B-1) as shown on page 3, lines 15-58, page 15, line 10 to page 16, line 45, and page 18, lines 11-32. Okamoto further teaches that when the intrinsic viscosity is less than 0.5 dl/g, the polymer tends to become sticky (page 11, line 33).

Therefore, it would have been obvious to a skilled artisan at the time the invention was made to employ Kijima's teaching to provide a sticky propylene polymer

with a intrinsic viscosity of less than 0.5 dl/g in order to provide a hot melt adhesives with increased stickiness and in the absence of any showing of criticality and unexpected results.

Response to Arguments

3. The new rejections as shown above are necessitated by applicants' amendments.

Applicants' argue that the lowest intrinsic viscosity reported in Kijima is 0.5, and thus applicants conclude, "it is clear that this reference does not suggest the process of the present invention". This is absurd. As shown in the previous Office action and rephrase as shown above, "Kijima teaches the process for prepare a propylene polymer with an intrinsic viscosity of 0.01 to 2.0 dl/g in the presence of a double bridged metallocene of formula (I) and cocatalyst of (B-1)". Just because Kijima demonstrates the preparation of propylene polymer with intrinsic viscosity of 0.5 or more, it does not mean that Kijima teaches that the propylene polymer with intrinsic viscosity of 0.5 or less can not be prepared. A skilled artisan would be able to prepare the propylene polymer with intrinsic viscosity of 0.5 or less according to Kijima's teaching through routine experimentation by varying the polymerization conditions such as lowering the molar ratio of aluminoxane to transition metal or introducing hydrogen to the polymerization system.

The showing of Applicants' Comparative Example 1 is not commensurate to the scope of the instant claims since it only represents one specific metallocene complex with one specific molar ratio of alumoxane to transition metal. It is noted that the

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aluminoxane molar concentration of Comparative Example 1 is much higher than molar ratio of borate to transition metal of Example 1, 0.2 mM vs. 0.8 μ M, therefore, they are not comparable. Based on applicants' Comparative Example 1 and Example 1, one can not conclude the metallocene complex with borate cocatalyst at any polymerizations will always provide a propylene polymer with intrinsic viscosity of 0.43 or less and the intrinsic viscosities of propylene polymers prepared with borate cocatalyst will always be lower than those of propylene polymers prepared with alumoxane cocatalyst at any polymerization conditions.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.


Caixia Lu, Ph. D.
Primary Examiner